

5 Euro Bill Inspection

Executive Summary

Optimet's MK10 HD with a 16 mm focal lens was used in the inspection of a 5 euro bill. The tests were performed only to demonstrate measurement capability. Using Optimet's highly qualified technology for scanning, we achieved optimal performances.

1. Optimet's Advantages over Other Technologies:

1. High lateral resolution
2. Auto-exposure feature with real time adjustment to different surface colors and reflection levels

2. Application Description

Scanning of a 5 euro bill using Optimet's MK10 HD with a 16 mm focal lens.

2.1 Method

Scanning with Optimet MK10 sensor and any appropriate stage system.

The bill was scanned twice, so that each scan measures the part of the bill with transparent tape and the part without. It's possible to identify a separation line between the parts.

Test settings:

Measurement rate - 9KHz

3. Results and Observations

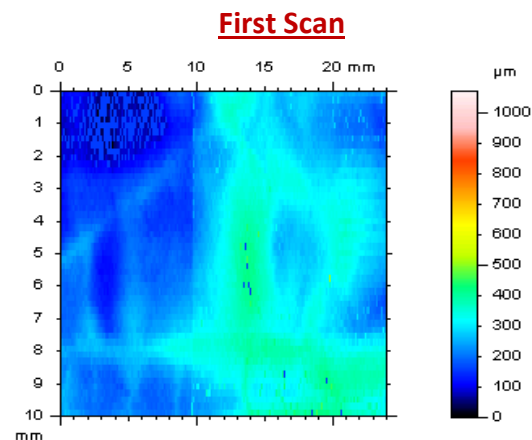


Figure 1 – Surface presentation

Note (fig.1) – The transparent tape was placed on the right side of the note



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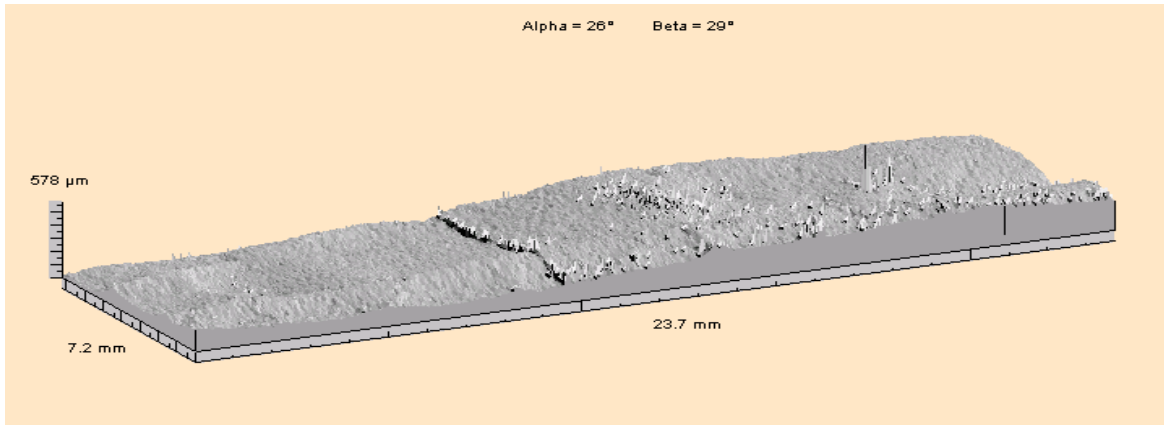


Figure 2 – 3D presentation

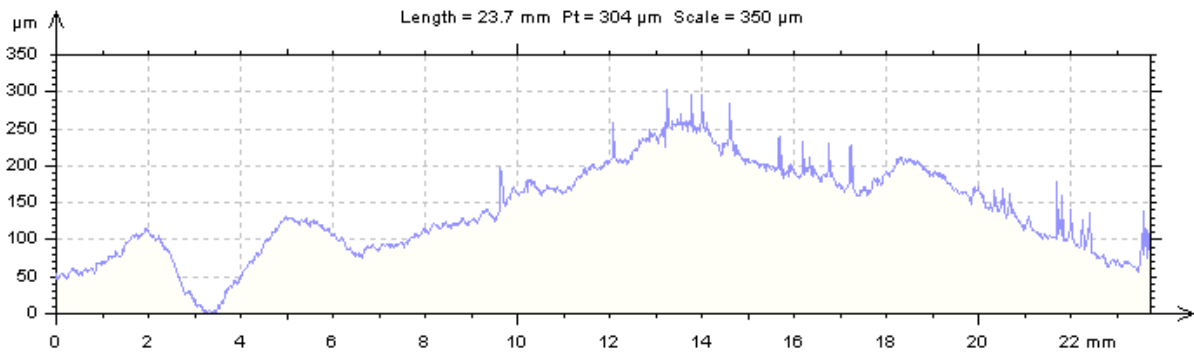


Figure 3 – Selected profile

Second Scan

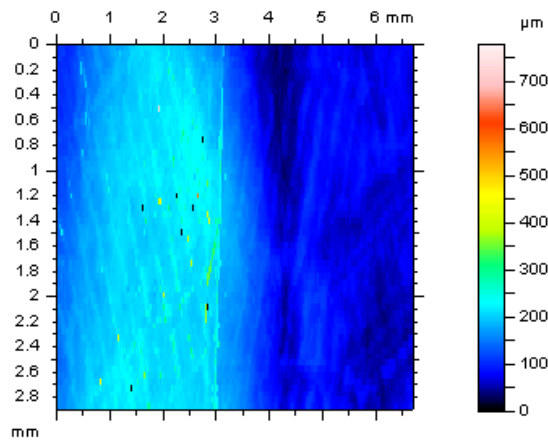


Figure 4 – Surface presentation

Note (fig.5) – The transparent tape was placed on the left side of the note.



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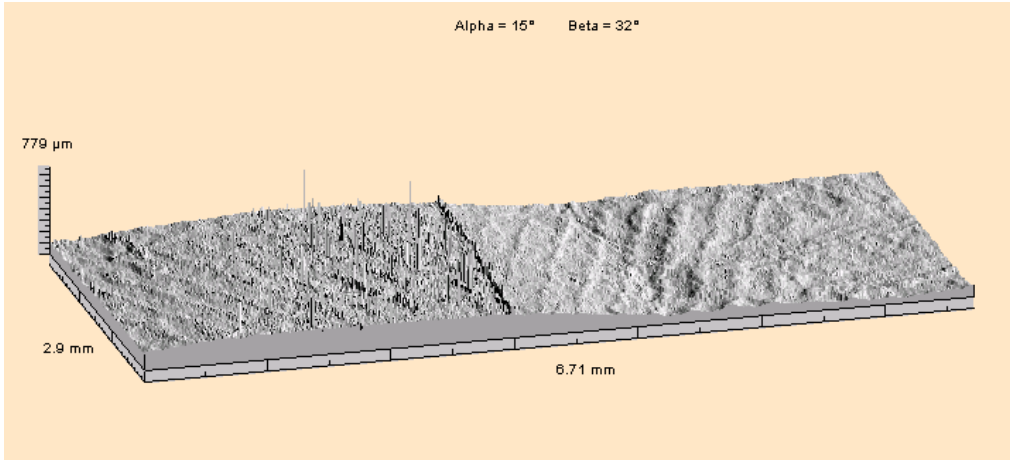


Figure 5 – 3D presentation

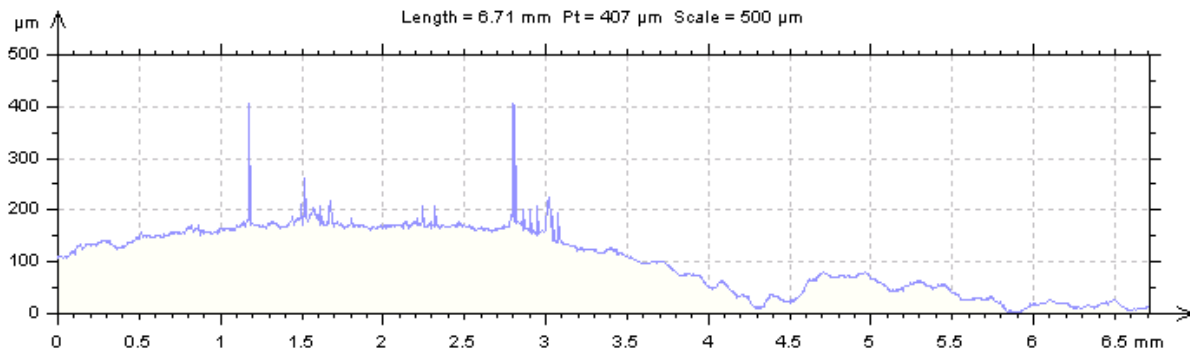


Figure 6 – Selected profile

4. Data

Parameter	Value
Reflective/Diffusive/Transparent/Translucent	Diffusive
Working Range (mm)	0.2
Precision (μm)	0.5
Stand Off (mm)	11
Max. Data Rate (Hz)	9K
Lateral Resolution	-
Z Resolution	-
Application Category	-